

REMARKS

Claims 1-16 were previously pending in the application and remain unchanged.

The Examiner has withdrawn the indication of allowability of Claims 3 and 4.

The claims stand rejected under the cited prior art of record. Specifically, Claims 1-4 and 6-16 are rejected under 35 USC §103(a) as being unpatentable over Shibuya (JP 8-49161) in view of Bronander (US 1,773,167). Claim 5 is rejected under 35 USC §103(a) as being unpatentable over Shibuya in view of Bronander, and further in view of Henry (US 6,722,053). Claim 16 is rejected under 35 USC §103(a) as being unpatentable over Bronander.

Independent Claim 1 recites a method of removing moisture from items of clothing, which comprises: bringing an item of clothing into contact with at least one absorbent body of an absorbent material in the form of a continuous strand; moving the at least one absorbent body and the item of clothing at the same speed; and subsequently separating the item of clothing from the at least one absorbent body.

Shibuya discloses a system for chemically processing clothing and applying a chemical agent to the clothing. In Shibuya, the clothing (40) is placed on a conveying member (12) that carries the clothing (40) through the device. The conveying member (12) includes a belt (10) that is both air permeable and liquid permeable. The device includes a first steam jet device (14) located below the belt (10) that sprays the clothing (40) with steam that passes through the belt (10) to reach the clothing (40). A chemical agent sprinkler (16) includes spray nozzles (28, 29) that spray the clothing (40) with the chemical agent and binder liquid. As shown in Fig. 1, the spray nozzle (29) is located below the belt (10) and sprays the chemical agent through the belt (10) to reach the clothing (40). A second steam jet device (18) is also located below the belt (10) that sprays the clothing (40) again with steam that passes through the belt (10) to reach the clothing (40). A drying chamber (37) dries the clothing (40) to effect firm sticking of the chemical agent to the clothing (40).

Shibuya does not disclose *any* of the elements recited in Claim 1. Shibuya does not disclose, among other things, “bringing an item of clothing into contact with at least one absorbent body of an absorbent material in the form of a continuous strand,” as recited in Claim 1. Shibuya discloses a drying chamber (37) to dry the clothing (40) and

the belt (10) is made from an air and liquid permeable material. As acknowledged by the Examiner, Shibuya does not include any absorbent materials.

Also, Shibuya does not disclose, among other things, “moving the at least one absorbent body and the item of clothing at the same speed,” as recited in Claim 1. Since Shibuya does not disclose any absorbent materials, it also does not disclose moving the absorbent materials at the same speed as the item of clothing.

Finally, Shibuya does not disclose, among other things, “separating the item of clothing from the at least one absorbent body,” as recited in Claim 1. Once again, since Shibuya does not disclose any absorbent materials, it also does not disclose separating the clothing from any absorbent materials.

For these and other reasons, Shibuya does not teach or suggest the subject matter defined by Claim 1.

Bronander does not cure the defects of Shibuya. Bronander discloses a method and apparatus for treating cloth material in a web form on large rolls or sheets. The machine includes a plurality of cloth rubbing devices (A, B, C, D) arranged to rub one or both surfaces of the cloth in opposite directions as the material passes through the machine. Each of these cloth rubbing devices (A, B, C, D) include two rolls (10, 11) and an endless belt (12) formed of suitable flexible absorbent material such as felt. Some of the cloth rubbing devices rub the cloth in the opposite direction of movement as the cloth, and some of the cloth rubbing devices rub the cloth in the same direction of movement as the cloth.

Bronander does not disclose the elements recited in Claim 1. Bronander does not disclose, among other things, “a method of removing moisture from items of clothing,” as recited in Claim 1. Rather, Bronander discloses a machine for finishing full rolls of material. Bronander does not teach or suggest treating individual items of clothing, and does not teach or suggest removing moisture from the individual items of clothing. Bronander discloses several rubbing devices that scrub the rolled material to remove marks, blemishes or disfigurements from the material after a dyeing process. Bronander may disclose a felt absorbent material, but Bronander does not disclose removing moisture from the rolled material with the felt. Bronander teaches scrubbing the rolled material with the belts (12) to remove the marks or blemishes from the material.

Also, Bronander does not disclose, among other things, “moving the at least one absorbent body and the item of clothing at the same speed,” as recited in Claim 1. Rather, Bronander discloses rubbing the rolled material with the belts (12). The belts (12) and rolled material of Bronander must be moved at *different speeds* to create the frictional rubbing action that is necessary to the rubbing devices. Therefore, Bronander does not teach or suggest moving the absorbent body and the item of clothing at the same speed, as recited in Claim 1. Bronander actually *teaches away* from the claimed invention by having half of the belts (12) moving in a *different direction*, let alone a different speed than the rolled material.

For these and other reasons, Bronander does not teach or suggest the subject matter defined by Claim 1.

The Examiner has not established a prima facie case of obviousness with respect to the claimed invention and the combination of Shibuya and Bronander. Three basic criteria must be met to establish a prima facie case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claims limitations.

First, the Examiner has not identified any suggestion or motivation within the prior art to combine Shibuya and Bronander. The level of skill in the art cannot be relied upon to provide the suggestion to combine references. The mere fact that references *can* be combined or modified does not render the resultant combination obvious unless the prior art also *suggests the desirability* of the combination. The mere fact that an absorbent material could be substituted for the air and liquid permeable conveying means (12) does not, by itself, suggest replacing the conveying means (12) of Shibuya with an absorbent material. There is no suggestion in the prior art to substitute an absorbent material for the conveying means (12) of Shibuya. Furthermore, the prior art provides no suggestion to explain why modifying Shibuya to include the absorbent material of Bronander would be desirable.

In the Office action dated August 25, 2005, the Examiner states that “it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute conveyor of Bronander for the conveyor 10 of Shibuya and to provide the method and apparatus of Shibuya with two absorbent bodies on both side the of the clothing and a pressure-exerting roller spaced apart from the absorbent conveyor as taught by Bronander in order to absorb clothes moisture and improve the cloth dewatering efficiency.”

Neither Shibuya nor Bronander are particularly relevant to absorbing moisture or cloth dewatering efficiency. Shibuya applies a chemical agent to the clothes and blasts the clothes with hot air at about 110-140 degrees to effect firm sticking of the chemical agent to the clothing. Bronander rubs the rolled material to remove marks or blemishes from the material after a dyeing process. One of ordinary skill in the art considering either Shibuya or Bronander would not have been motivated to “improve cloth dewatering efficiency” of either Shibuya or Bronander because neither of these devices are concerned with this function.

The Examiner’s proposal to “absorb clothes moisture and improve the cloth dewatering efficiency” suggests that improper *hindsight* was used in making the proposed modification. There is no suggestion or motivation in the express teachings of the references of Shibuya and Bronander to make the modification proposed by the Examiner. Only the Applicants present application concerns absorbing clothes moisture and cloth dewatering. No prior art reference has taught or suggested such a combination as recited in the claims for the purpose of removing moisture from items of clothing. This motivation to “absorb clothes moisture and improve the cloth dewatering efficiency” can only be traced to the present application. Unless the Examiner can cite some specific suggestion or motivation in the express teachings of the prior art to make the proposed modification, Applicants respectfully believe that any teaching, suggestion, or incentive possibly derived from the prior art is only present with hindsight judgment in view of the present application.

A critical step in analyzing the patentability of claims pursuant to 35 U.S.C. § 103 is, casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted

wisdom in the field. See In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher." Id. (quoting W.L. Gore & Assocs. Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983)).

Most if not all inventions arise from a combination of old elements. See In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998). Thus, every element of a claimed invention may often be found in the prior art. See id. However, mere identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. See id. "It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps. ... The references **themselves** must provide some teaching whereby the applicant's combination would have been obvious." In re Gorman, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (emphasis added). Here, no such teaching or suggestion is present in either Shibuya or Bronander and the Examiner has not cited any such teaching or suggestion. Therefore, there is no suggestion or motivation within the prior art to combine Shibuya or Bronander.

Also, there is no motivation to make the proposed modification to Shibuya due to the functionality of Shibuya itself. Shibuya already provides a suction device (20) and a dryer (22) having a heater (36). The dryer (22) provides a hot blast with a temperature of about 110-140 degrees to effect firm sticking of the chemical agent to the clothing. The purpose of Shibuya is to apply a chemical agent to the clothing. Shibuya specifically has drying devices that do not contact the clothing, such as the suction device (20) and the heater (36), to avoid disrupting the chemical agents applied to the clothing. There is no motivation to provide additional drying means, such as an absorbent material, because Shibuya already has an optimal drying means specifically made for its intended purpose. Therefore, there is no motivation to make the proposed modification.

In addition, there is no suggestion or motivation to make the proposed modification if the proposed modification would render the prior art being modified

unsatisfactory for its intended purpose. Shibuya discloses a process for chemically treating clothing. Shibuya includes a conveying means (12) having a belt (10) that is air and liquid permeable. As shown in Fig. 1 of Shibuya, the conveying means (12) carries the clothing (40) through a first steam injection equipment (14) that includes injection nozzles (24) located below the belt (10). (See Fig. 1 and paragraph 9) Therefore, the belt (10) is positioned between the clothing (40) and the injection nozzles (24), and the injection nozzles (24) spray steam *through* the air and liquid permeable belt (10) and onto the clothing (40).

Shibuya also discloses chemical spray equipment (16) having spray nozzles (29) located below the belt (10). The spray nozzles (29) spray chemicals *through* the air and liquid permeable belt (10) and onto the clothing (40) to chemically treat the clothing (40). Shibuya also includes a second steam injection equipment (18) having additional injection nozzles (24) located below the belt (10). These injection nozzles (24) also spray steam *through* the air and liquid permeable belt (10) and onto the clothing (40). Therefore, a significant intended purpose of the air and liquid permeable belt (10) of Shibuya is to permit steam and chemical agents to easily pass through the belt (10).

The modification proposed by the Examiner includes substituting the absorbent material of Bronander for the belt (10) of Shibuya. This modification would render Shibuya unsatisfactory for its intended purpose of permitting steam and chemical agents to easily pass through the belt (10) and act on all sides the clothing (40). The absorbent material of Bronander would absorb the moisture or chemical agents that were intended for the clothing (40) in Shibuya. The absorbent material would prevent the nozzles located below the belt (10) from spraying their discharge on the clothing (40).

Also, an intended purpose of Shibuya is to apply a chemical treatment to the clothing. This chemical treatment is sprayed on the clothing in a chemical solution and steam is also sprayed on the clothing to facilitate even distribution of the chemical solution on clothing. Bringing an absorbent material in contact with the chemically treated clothing (40) would absorb some of the chemical solution away from the clothing. Shibuya only includes an air dryer (22) having a blower (38) that dries the clothing with a hot blast of air through the belt (10) to adhere the chemical agents onto the clothing. The dryer in Shibuya does not contact the clothing. Therefore, modifying the conveyor of

Shibuya to include an absorbent material would render the conveyor of Shibuya unsatisfactory for its intended purpose, and there is no suggestion or motivation to make the proposed modification.

Bronander also teaches rubbing the rolled cloth material with the absorbent felt material. Rubbing the chemically treated clothing (40) of Shibuya with the absorbent material of Bronander would be even more detrimental to the chemical agents applied to the clothing by removing the agents or disrupting the even distribution of the spraying devices. This is precisely what Shibuya is trying to avoid by using the air and liquid permeable belt (10). Therefore, Bronander teaches away from the proposed modification and there is no suggestion or motivation to make the proposed modification.

In previous Office actions, the Examiner proposed modifying the belt (10) Shibuya with absorbent materials from other references. This latest Office action merely substitutes the absorbent material of Bronander for these other materials. Modifying the belt (10) of Shibuya with *any* material that is not air and liquid permeable would render Shibuya unsatisfactory for its intended purpose. By definition, any absorbent material would absorb the moisture or chemical agents that were intended for the clothing (40) in Shibuya. The absorbent material would prevent the nozzles located below the belt (10) from spraying their discharge on the clothing (40). The steam jet devices (14, 18), spray nozzles (29), suction device (20), and dryer (22) of Shibuya would be incapable of their intended purpose of applying and firmly sticking the chemical agents onto all sides of the clothing. Therefore, there is no motivation to modify the belt (10) of Shibuya with *any* material that is not air and liquid permeable.

Therefore, the Examiner has not established a prima facie case of obviousness with respect to the claimed invention, and it would not have been obvious for one of ordinary skill in the art to combine Shibuya and Takeuchi to derive the claimed invention.

For these and other reasons, Shibuya and Bronander, either alone or in combination, do not teach or suggest the subject defined by independent Claim 1. Therefore, Claim 1 is allowable. Claims 2 and 5-10 depend from Claim 1 and are allowable for the same reasons and also because they recite additional patentable subject matter.

Independent Claim 3 recites a method of removing moisture from items of clothing, which comprises: bringing an item of clothing into contact with at least one absorbent body of an absorbent material in the form of a continuous strand; moving the at least one absorbent body and the item of clothing at the same speed; subsequently separating the item of clothing from the at least one absorbent body; removing moisture from the absorbent body following contact with the item of clothing; providing the absorbent body with a plurality of sections; and successively bringing individual sections of the absorbent body into contact with the item of clothing, separating the section from the item of clothing, and removing moisture from the item of clothing.

Claim 3 recites all the limitations of Claim 1, as well as additional limitations. Therefore, all the remarks above in relation to Claim 1 are also applicable to Claim 3. In addition, neither Shibuya nor Bronander disclose some of the additional limitations recited in Claim 3. Neither Shibuya nor Bronander disclose, among other things, “removing moisture from the absorbent body following contact with the item of clothing,” as recited in Claim 3.

For these and other reasons, Shibuya and Bronander, either alone or in combination, do not teach or suggest the subject defined by independent Claim 3. Therefore, Claim 3 is allowable. Claim 4 depends from Claim 3 and is allowable for the same reasons and also because it recites additional patentable subject matter.

Independent Claim 11 recites a method of removing moisture from items of clothing, which comprises: bringing an item of clothing into contact with at least one absorbent body of an absorbent material in the form of a continuous strand and having a plurality of sections; circulating the absorbent body to successively move individual sections of the absorbent body into contact with the item of clothing and to a configuration for removing moisture from a section of the absorbent body; separating the section from the item of clothing; subjecting the item of clothing to action of at least one gas jet acting transversely to a surface of the item of clothing following contact with the absorbent body; and removing moisture from the absorbent body following contact with the item of clothing. Claim 11 has been amended to correct typographical errors.

The Examiner has not established a prima facie case of obviousness with respect to the claimed invention, as recited in Claim 11. As described above in relation to Claim

1, there is no suggestion or motivation to combine Shibuya and Bronander. The same arguments above in relation to Claim 1 also apply to the combination of Shibuya and Bronander for Claim 11.

For these and other reasons, Takeuchi and Shibuya, either alone or in combination, do not teach or suggest the subject defined by independent Claim 11. Therefore, Claim 11 is allowable.

Independent Claim 12 recites a configuration for removing moisture from items of clothing, comprising: at least one absorbent body of an absorbent material in the form of a continuous strand being brought into contact with an item of clothing and being moved at the same speed as the item of clothing; and a contacting device adapted to contact an item of clothing with said at least one absorbent body and to separate the item of clothing from said at least one absorbent body.

The Examiner has not established a prima facie case of obviousness with respect to the claimed invention, as recited in Claim 12. As described above in relation to Claim 1, there is no suggestion or motivation to combine Shibuya and Bronander. The same arguments above in relation to Claim 1 also apply to the combination of Shibuya and Bronander for Claim 12.

For these and other reasons, Shibuya and Bronander, either alone or in combination, do not teach or suggest the subject defined by independent Claim 12. Therefore, Claim 12 is allowable. Claims 13-15 depend from Claim 12 and are allowable for the same reasons and also because they recite additional patentable subject matter.

Independent Claim 16 recites a configuration for removing moisture from items of clothing, comprising: at least one absorbent body of a microfiber material; a contacting device adapted to contact an item of clothing with said at least one absorbent body and to separate the item of clothing from said at least one absorbent body, said contacting device having a pressure-exerting roller spaced apart from said at least one absorbent body, and a transporting device moving a plurality of items of clothing successively in a direction of said at least one absorbent body and away therefrom and between said at least one absorbent body and said pressure-exerting roller.

The Examiner has not established a prima facie case of obviousness with respect to the claimed invention, as recited in Claim 16. As described above in relation to Claim

1, there is no suggestion or motivation to combine Shibuya and Bronander. The same arguments above in relation to Claim 1 also apply to the combination of Shibuya and Bronander for Claim 16.

For these and other reasons, Shibuya and Bronander, either alone or in combination, do not teach or suggest the subject defined by independent Claim 16. Therefore, Claim 16 is allowable.

Claim 16 was also rejected as being unpatentable over Bronander alone. The Examiner states that "it is well know in the moisture removing art to use microfiber material as absorbent." The Examiner also states "it would have been obvious to one having ordinary skill in the art at the time the invention was made to further provide the cloth dewatering apparatus of Bronander with a microfiber absorbent in order to improve the dewatering efficiency."

Applicants disagree that using microfiber as an absorbent material would be obvious. There are a wide variety of absorbent materials having various specific properties and it is not always obvious to merely substitute one absorbent material for another. Such a conclusory statement that "it is well know in the moisture removing art to use microfiber material as absorbent" is not supported by any facts from the prior art and does not make the use of a microfiber in the apparatus recited in Claim 16 obvious. Bronander teaches using felt for the belt material. Felt is a fabric made of compressed matted animal fibers. The belt of Bronander rubs the rolled cloth material and is specifically designed to be relatively abrasive, such as felt, to remove the marks or blemishes from the rolled material after a dyeing process.

Microfiber is a fine synthetic woven fiber. There is not teaching or suggestion in the prior art to replace the compressed matted animal fiber felt material of Bronander with a microfiber. These materials have several different properties and are not necessarily suitable for the same purposes. As described above, Bronander is not particularly relevant to removing moisture from clothing. Bronander merely provides a frictional rubbing action to scrub marks or blemishes from the rolled cloth material. There is no teaching or suggestion that a microfiber would be suitable for providing this frictional rubbing action that is necessary for the operation of Bronander. Therefore, it

would not have been obvious to substitute the felt material of Bronander with a microfiber, as recited in Claim 16.

Bronander does not disclose, among other things, “a transporting device moving a plurality of items of clothing successively in a direction of said at least one absorbent body and away therefrom and between said at least one absorbent body and said pressure-exerting roller,” as recited in Claim 16. Bronander does not disclose any items of clothing or removing moisture from items of clothing. Bronander also does not disclose any type of transporting device moving a plurality of items of clothing. Rather, Bronander merely discloses a bulk rolled material in a web form that is fed through a series of rubbing devices. The rolled cloth material of Bronander is not a plurality of items of clothing. Furthermore, the rubbing devices of Bronander are incapable of treating any type of individual item that is not connected in one continuous string. Therefore, Bronander does not teach or suggest all the claim limitations of Claim 16.

For these and other reasons, Bronander does not teach or suggest the subject defined by independent Claim 16. Therefore, Claim 16 is allowable.

CONCLUSION

In view of the above, reconsideration of the rejections and allowance of Claims 1-16 are respectfully requested. If the Examiner has any questions regarding this amendment, the Examiner is requested to contact the undersigned. If an extension of time for this paper is required, petition for extension is herewith made. Please note that Applicants have changed representation and are now represented by new counsel. The formal Revocation of Power of Attorney / New Power of Attorney and Change of Correspondence Address documents were previously filed in a separate paper.

Respectfully submitted,



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November 23, 2005

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